IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Ravindra Pandey et al.

U.S. Patent Application No. 10/607,922

For: FLUORINATED PHOTOSENSITIZERS RELATED TO CHLORINS AND BACTERIOCHLORINS FOR PHOTDYNAMIC THERAPY

Filed: June 27, 2003

Examiner: Nwaonicha, Chukwuma

Group Art Unit: 1621

Confirmation No.: 8140

Customer No.: 24041

Certificate of Mailing by First Class Mail

I certify that this Correction Letter is being deposited on August 8, 2005 with the U.S. Postal Service as first class mail under 37 C.F.R. §1.8 and is addressed to the Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450.

Michael L. Dunn, Reg. No. 25330

CORRECTION LETTER

Mail Stop Amendment
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Honorable Sir:

This calls attention to minor matters on the amendment mailed to the U.S. Patent and Trademark Office on August 4, 2005 (copy of same enclosed in its entirety).

The application number in the header should have been "10/607,922" rather than "10/606,922".

The total claims should have been "19" on the Transmittal Letter instead of "18"..

In the first line of the amendment after "Honorable Sir", "October 20, 2003" should have been "May 4, 2005".

In view of the foregoing amendments and remarks, it is clear that all claims are in condition for allowance, which action is courteously requested.

Respectfully submitted,

Michael L. Dunn
Registration number 25,330
CUSTOMER NO. 24041
Simpson & Simpson, PLLC
5555 Main Street
Williamsville, NY 14221-5406
Telephone No. 716-626-1564

Dated: August 8, 2005

MLD/mjk
Enc.

TRANSMITTAL LETTER (General - Patent Pending)	Docket No. RPP174AUS

In Re Application Of: **Ravindra Pandey et al.**

Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
10/607,922	June 27, 2003	Chukwuma Nwaonicha	24041	1621	8140

Title: **FLUORINATED PHOTOSENSITIZERS RELATED TO CHLORINS AND BACTERIOCHLORINS FOR PHOTODYNAMIC THERAPY**

COMMISSIONER FOR PATENTS:

Transmitted herewith is:

1) Correction Letter
1) Copy of Amendment & Request for Reconsideration dated August 4, 2004 (with copies of transmittal & postcard)
1) Certificate of Mailing by First Class Mail
1) Acknowledgement postcard

in the above identified application.

- ☒ No additional fee is required.
- ☐ A check in the amount of is attached.
- ☒ The Director is hereby authorized to charge and credit Deposit Account No. **50-0822** as described below.
  - ☐ Charge the amount of
  - ☐ Credit any overpayment.
  - ☒ Charge any additional fee required.
- ☐ Payment by credit card. Form PTO-2038 is attached.

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Signature

Dated: **August 8, 2005**

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August 8, 2005-
(Date)

Signature of Person Mailing Correspondence

Michael L. Dunn

Typed or Printed Name of Person Mailing Correspondence

cc:

Applicant(s): Ravindra K. Pandey et al.
U.S. Patent Application No. 10/607,922
Filing Date: June 27, 2003
For: FLUORINATED PHOTOSENSITIZERS RELATED TO CHLORINS AND BACTERIOCHLORINS FOR PHOTODYNAMIC THERAPY
GAU: 1621
Confirmation No. : 8140

Transmitted Herewith is:

(1) Amendment Transmittal Letter (Small Entity)
(1) Amendment and Request for Reconsideration
(1) Certificate of Mailing by First Class Mail
(1) Acknowledgement Postcard

MSK 8/5/05

Attorney Docket No.: 1210.RPP174AUS

Customer No. 24041

AMENDMENT TRANSMITTAL LETTER (Small Entity) Applicant(s): Ravindra K. Pandey et al.					Docket No. RPP174AUS
Application No. 10/607,922	Filing Date June 27,2003	Examiner Chukwuma O. Nwaonicha	Customer No. 24041	Group Art Unit 1621	Confirmation No. 8140

Invention: FLUORINATED PHOTOSENSITIZERS RELATED TO CHLORINS AND BACTERIOCHLORINS FOR PHOTODYNAMIC THERAPY

COMMISSIONER FOR PATENTS:

Transmitted herewith is an amendment in the above-identified application.

☒ Applicant claims small entity status. See 37 CFR 1.27

The fee has been calculated and is transmitted as shown below.

CLAIMS AS AMENDED

	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST # PREV. PAID FOR	NUMBER EXTRA CLAIMS PRESENT	RATE	ADDITIONAL FEE
TOTAL CLAIMS	18 19 -	124 =	0	x $25.00	$0.00
INDEP. CLAIMS	1 -	3 =	0	x $100.00	$0.00
Multiple Dependent Claims (check if applicable) ☐					$0.00
TOTAL ADDITIONAL FEE FOR THIS AMENDMENT					$0.00

☐ No additional fee is required for amendment.

☐ Please charge Deposit Account No. in the amount of

☐ A check in the amount of to cover the filing fee is enclosed.

☒ The Director is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 50-0822

- ☒ Any additional filing fees required under 37 C.F.R. 1.16.
- ☒ Any patent application processing fees under 37 CFR 1.17.

☐ Payment by credit card. Form PTO-2038 is attached.

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Michael L. Dunn

Signature

Dated: August 4, 2005

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Michael L. Dunn

Signature of Person Mailing Correspondence

Michael L. Dunn

Typed or Printed Name of Person Mailing Correspondence

cc:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Ravindra Pandey ~~et al~~

U.S. Patent Application No. 10/606,922

For: FLUORINATED PHOTOSENSITIZERS RELATED TO CHLORINS AND BACTERIOCHLORINS FOR PHOTDYNAMIC THERAPY

Filed: June 27, 2003

Examiner: Nwaonicha, Chukwuma

Group Art Unit: 1621

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Michael L. Dunn, Reg. No. 25330

AMENDMENT AND REQUEST FOR RECONSIDERATION

Mail Stop Amendment
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Honorable Sir:

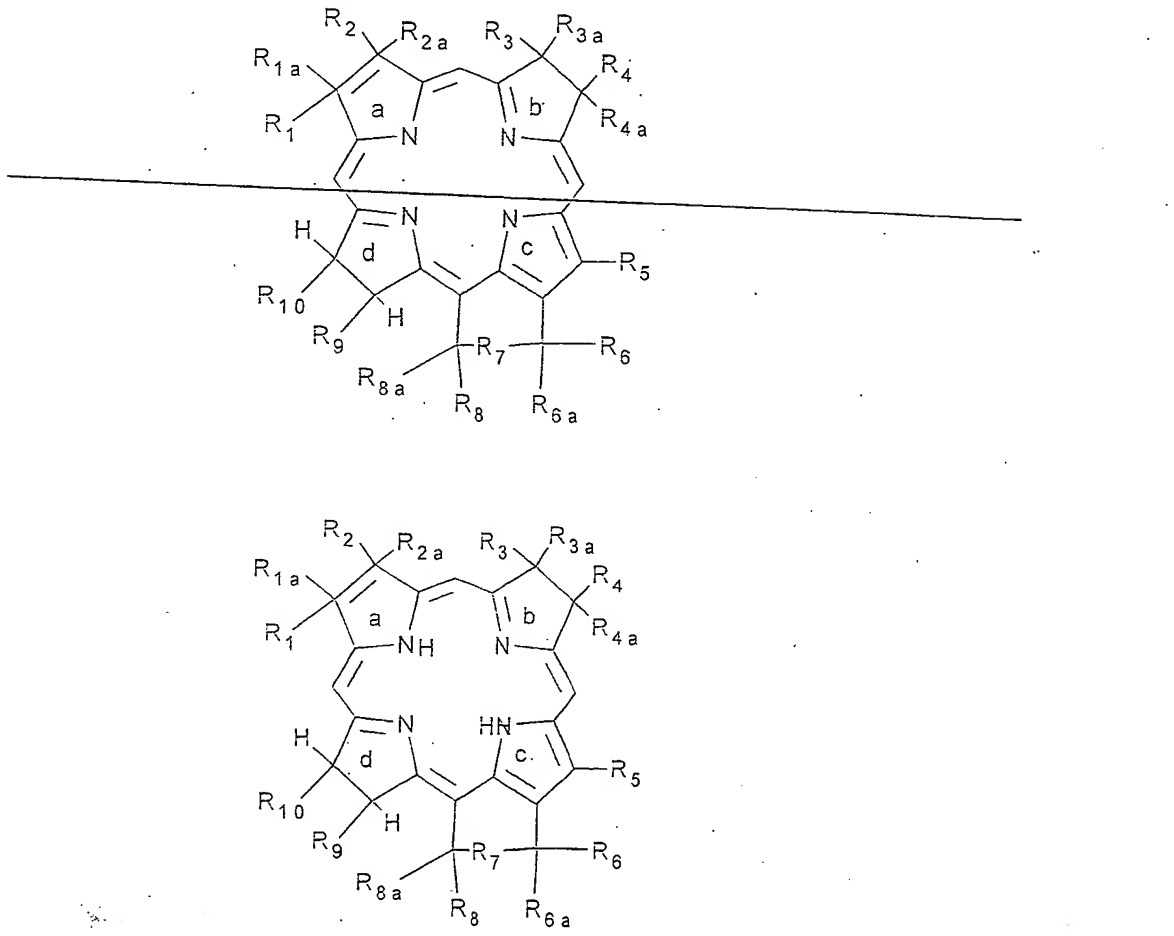
Responsive to the official action of October 20, 2003, May 4, 2005 please amend the above identified patent application as follows:

In The Claims

Please amend the claims as follows:

Claims 1-4 (cancelled)

Claim 5 (currently amended) A compound of the formula:



or a phamaceutically acceptable derivative thereof, wherein:

R_1 and R_2 are each independently substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, $-C(O)R_a$ or $-COOR_a$ or [[$-CH(CH_3)(OR)$ or $-CH(CH_3)(O(CH_2)_nXR)$]] $-CH(CH_3)(OR_a)$ or $-CH(CH_3)(O(CH_2)_nXR_a)$ where R_a is hydrogen, substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, or substituted or unsubstituted cycloalkyl ~~where R_2 may be $CH=CH_2$, $CH(OR_{20})CH_3$, C(O)Me, $C(=NR_{21})CH_3$ or $CH(NHR_{21})CH_3$~~ ; where R_2 may be $-CH=CH_2$, $-CH(OR_{20})CH_3$, -C(O)Me, $-C(=NR_{21})CH_3$ or $-CH(NHR_{21})CH_3$

where X is an aryl or heteroaryl group;

n is an integer of 0 to 6;

~~R and R'~~

where R_{20} is methyl, butyl, heptyl, docecyl or 3,5-bis(trifluoromethyl)-benzyl; and

R_{21} is 3,5,-bis(trifluoromethyl)benzyl;

R_{1a} and R_{2a} are each independently hydrogen or substituted or unsubstituted alkyl, or together form a covalent bond;

R_3 and R_4 are each independently hydrogen or substituted or unsubstituted alkyl;

R_{3a} and R_{4a} are each independently hydrogen or substituted or unsubstituted alkyl, or together form a covalent bond;

R_5 is hydrogen or substituted or unsubstituted alkyl;

R_6 and R_{6a} are each independently hydrogen or substituted or unsubstituted alkyl, or together form =O;

R_7 is a covalent bond, alkylene, azaalkyl, or azaaraalkyl or $=NR_{20}$ where R_{20} is 3,5-bis(tri-fluoromethyl)benzyl or $-CH_2X-R^1$ or $-YR^1$ where Y is an aryl or heteroaryl group;

R_8 and R_{8a} are each independently hydrogen or substituted or unsubstituted alkyl or together form =O;

R_9 and R_{10} are each independently hydrogen, or substituted or unsubstituted alkyl and R_9 may be $-CH_2CH_2COOR^2$ where R^2 is an alkyl group that may optionally substituted with one or more fluorine atoms;

each of R_1-R_{10}, when substituted, is substituted with one or more substituents each independently selected from Q, where Q is alkyl, haloalkyl, halo, pseudohalo, or $-COOR_b$ where R_b is hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, ~~or~~ aryl, heteroaryl, araalkyl, or OR_c where R_c is hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, or aryl or $CONR_dR_e$ where R_d and R_e are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, or aryl, or NR_fR_g where R_f and R_g are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, or aryl, or $=NR_h$ where R_h is hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, or aryl, or is an amino acid residue;

each Q is independently unsubstituted or is substituted with one or more substituents each independently selected from Q_1, where Q_1 is alkyl, haloalkyl, halo, pseudohalo, or $-COOR_b$ where R_b is hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, ~~or~~ aryl, heteroaryl, araalkyl, or OR_c where R_c is hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, or aryl or $CONR_dR_e$ where R_d and R_e are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, or aryl, or NR_fR_g where R_f and R_g are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, or aryl, or $=NR_h$ where R_h is hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, or aryl, or is an amino acid residue. ;

with the proviso that the compound contains at least one fluorine atom in at least one 3,5,-bis(trifluoromethyl)benzyl group or in at least one R, R^1, or R^2 group.

Claims 6-7 (cancelled)

Claim 8 (previously presented). The compound of claim 5 wherein:

R_1 is methyl;

R_{1a} and R_{2a} together form a covalent bond;

R_3 is methyl;

R_4 is ethyl;

R_{3a} and R_{4a} are each independently hydrogen, or together form a covalent bond;

R_5 is methyl;

R_9 is CH_2CH_2COOH or CH_2CH_2COOMe;

R_{10} is methyl.

Claim 9 (previously presented) The compound of claim 5, wherein:

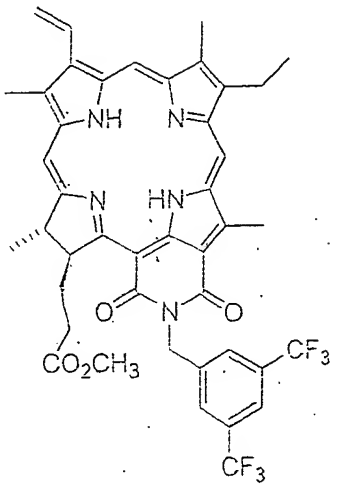
R_2 is $CH=CH_2$, $CH(OR_{20})CH_3$, C(O)Me, $C(=NR_{21})CH_3$ or $CH(NHR_{21})CH_3$;

where R_{20} is methyl, butyl, heptyl, dodecyl or 3,5-bis(trifluoromethyl)-benzyl; and

R_{21} is 3,5-bis(trifluoromethyl)benzyl.

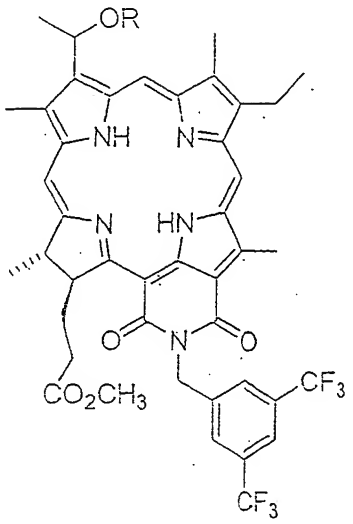
Claim 10 (cancelled)

Claim 11 (previously presented) The compound of claim 5 having the formula:



or a pharmaceutically acceptable derivative thereof.

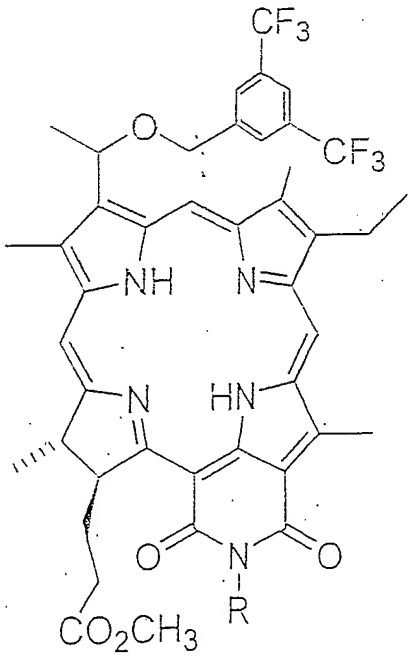
Claim 12 (previously presented) The compound of claim 5 having the formula:



or a pharmaceutically acceptable derivative thereof, wherein:

R is methyl, butyl, heptyl or dodecyl.

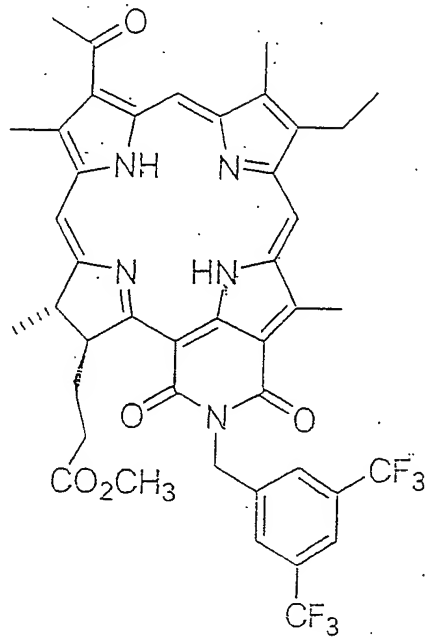
Claim 13 (previously presented) The compound of claim 5 having the formula:



or a pharmaceutically acceptable derivative thereof, wherein:

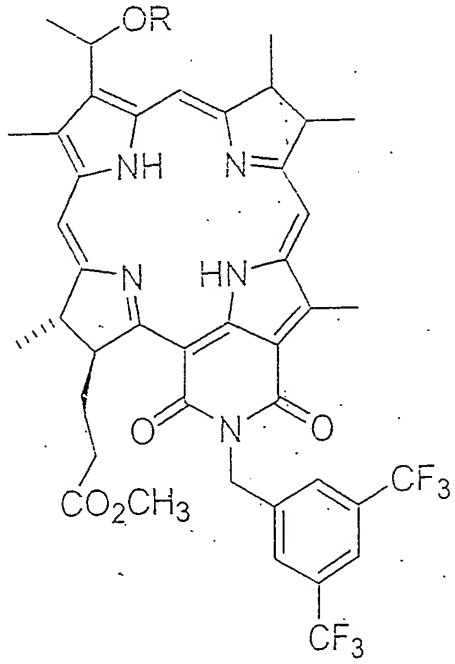
R is methyl, butyl, heptyl or dodecyl.

Claim 14 (previously presented) The compound of claim 5 having the formula:



or a pharmaceutically acceptable derivative thereof.

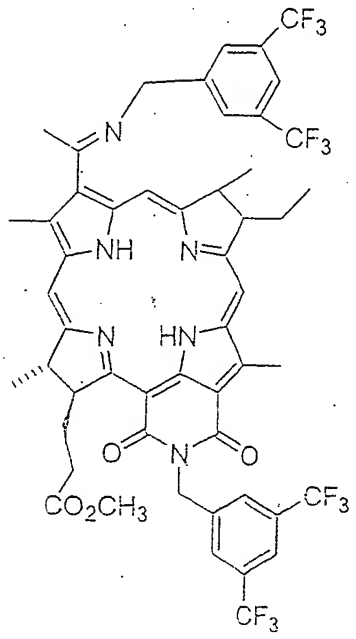
Claim 15 (previously presented) The compound of claim 5 having the formula:



or a pharmaceutically acceptable derivative thereof, wherein:

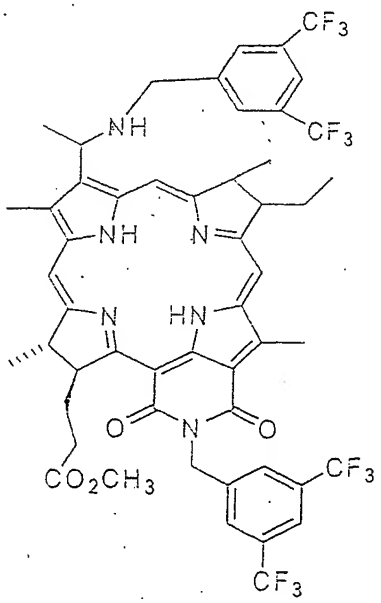
R is methyl, butyl, heptyl or dodecyl.

Claim 16 (previously presented) The compound of claim 5 having the formula:



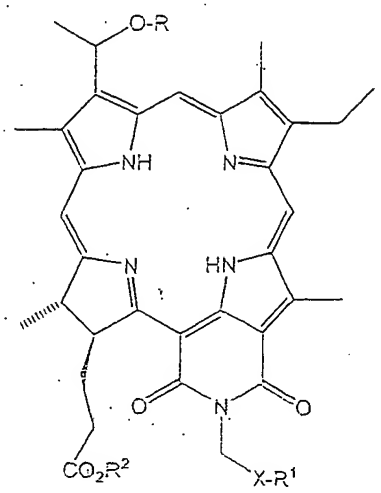
or a pharmaceutically acceptable derivative thereof.

Claim 17 (previously presented) The compound of claim 5 having the formula:



or a pharmaceutically acceptable derivative thereof.

Claim 18 (previously presented) The compound of claim 5 having the formula:



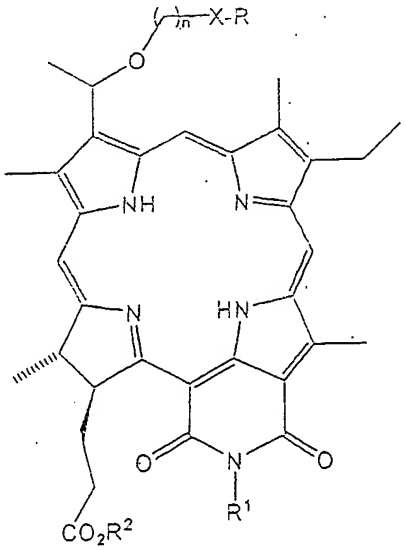
or a pharmaceutically acceptable derivative thereof, wherein:

X is an aryl or heteroaryl group;

R and R^1 are each independently alkyl, aryl, or heteroaryl groups having 1 – 20 carbon atoms, wherein at least one of R and R^1 is substituted with at least one fluorine atom; and

R^2 is an alkyl group, optionally substituted with one or more fluorine atoms.

Claim 19 (previously presented) The compound of claim 5 having the formula:



or a pharmaceutically acceptable derivative thereof, wherein:

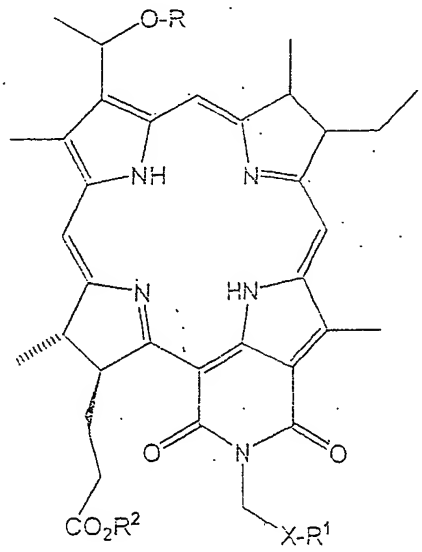
X is an aryl or heteroaryl group;

n is an integer from 0 to 6;

R and R^1 are each independently alkyl, aryl, or heteroaryl groups having 1 – 20 carbon atoms, wherein at least one of R and R^1 is substituted with at least one fluorine atom; and

R^2 is an alkyl group, optionally substituted with one or more fluorine atoms.

Claim 20 (previously presented) The compound of claim 5 having the formula



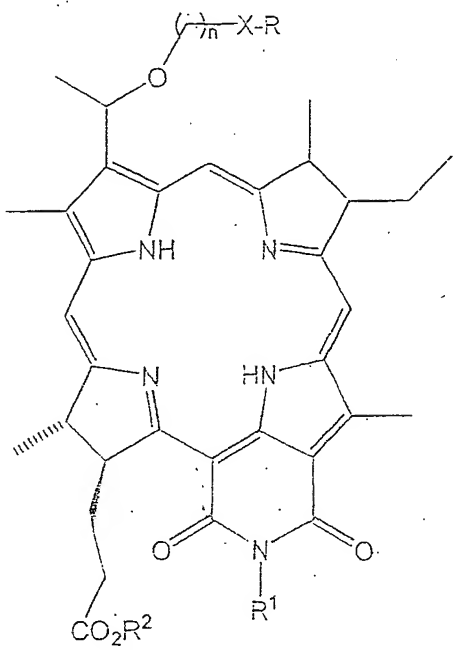
or a pharmaceutically acceptable derivative thereof, wherein:

X is an aryl or heteroaryl group;

R and R^1 are each independently alkyl, aryl, or heteroaryl groups having 1 – 20 carbon atoms, wherein at least one of R and R^1 is substituted with at least one fluorine atom; and

R^2 is an alkyl group, optionally substituted with one or more fluorine atoms.

Claim 21 (previously presented) The compound of claim 5 having the formula:



or a pharmaceutically acceptable derivative thereof, wherein:

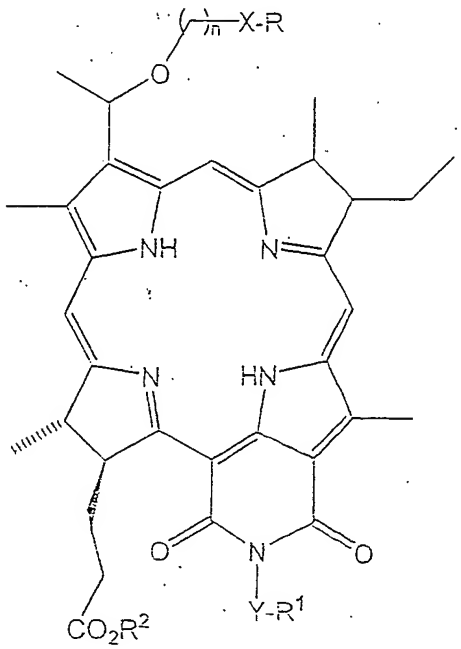
X is an aryl or heteroaryl group;

n is an integer from 0 to 6;

R and R^1 are each independently alkyl, aryl, or heteroaryl groups having 1 – 20 carbon atoms, wherein at least one of R and R^1 is substituted with at least one fluorine atom; and

R^2 is an alkyl group, optionally substituted with one or more fluorine atoms.

Claim 22 (previously presented) The compound of claim 5 having the formula:



or a pharmaceutically acceptable derivative thereof, wherein:

X and Y are each independently an aryl or heteroaryl group;

n is an integer from 0 to 6;

R and R^1 are each independently alkyl, aryl, or heteroaryl groups having 1 – 20 carbon atoms, wherein at least one of R and R^1 is substituted with at least one fluorine atom; and

R^2 is an alkyl group, optionally substituted with one or more fluorine atoms.

Claim 23 (previously presented)

A pharmaceutical composition, comprising a compound of claim 1 or a pharmaceutically acceptable derivative thereof in a pharmaceutically acceptable carrier.

Claims 24-121 (cancelled)

Claim 122 (previously presented) The compound of claim 17 or a pharmaceutically acceptable derivative thereof when used for the detection or treatment or both of hyperproliferative tissue.

Claim 123 (previously presented) The compound of claim 18 or a pharmaceutically acceptable derivative thereof when used for the detection or treatment or both of hyperproliferative tissue.

Claim 124 (previously presented) The compound of claim 19 or a pharmaceutically acceptable derivative thereof when used for the detection or treatment or both of hyperproliferative tissue.

Remarks

The Examiner in the official action referred a couple of times to a response filed by the Applicants on December 13, 2004. The Applicants filed no such amendment on that date but rather filed an amendment on February 7, 2005. It is unclear what the Examiner is referring to.

The Examiner has rejected claim 8 as being anticipated by the Li et al reference under 35 U.S.C. 102. The Examiner is in error.

The amendment of February 7, 2005 amended claim 5 so that it requires at least one fluorine atom in at least one 3,5,-bis(trifluoromethyl)benzyl group or in at least one R, R^1, or R^2 group. All remaining claims depend from claim 5 and thus also require at least one fluorine atom in at least one 3,5,-bis(trifluoromethyl)benzyl group or in at least one R, R^1, or R^2 group. Claim 8 thus requires at least one fluorine atom in at least one 3,5,-bis(trifluoromethyl)benzyl group or in at least one R, R^1, or R^2 group. Li et al discloses or suggests no such compound.

The rejection should be withdrawn.

Claims 5, 8, 9 and 10 have been rejected under 35 U.S.C. 103 as being unpatentable over Pandey et al., U.S. 5,952,366) in view of Li et al.

This rejection is improper and should be withdrawn.

As discussed above, All remaining claims require at least one fluorine atom in at least one 3,5,-bis(trifluoromethyl)benzyl group or in at least one R, R^1, or R^2 group. Pandey et al. disclose or suggest no such compound. No trifluoromethyl compound of any kind is

suggested by Pandey et al. and likewise no trifluoromethyl compound of any kind is suggested by Li et al. It is thus clear that this combination of references cannot and does not suggest any trifluoromethyl compound and certainly not the (trifluoromethyl)benzyl compounds presently claimed.

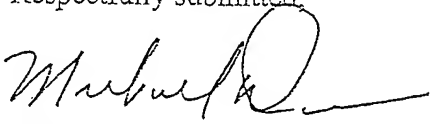
The Examiner has rejected claim 5 as being indefinite under 35 U.S.C. 112 because R and R' are not defined. R and R' and have been deleted by amendment.

The Examiner has rejected claim 5 as being indefinite under 35 U.S.C. 112 because the nitrogen in the general formula has two bonds instead of three. This is clearly a typographical type error. The nitrogens in the a and c rings clearly have an attached hydrogen as is well known with respect to unsaturated a and c rings of tetrapyrol type compounds. The claim has been amended to remove the objection.

Claim 10 has been cancelled.

In view of the foregoing amendments and remarks, it is clear that all claims are in condition for allowance, which action is courteously requested.

Respectfully submitted,



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